

all those *Zoosporeæ* in which hitherto zoospores only have been found.

The following is a short summary of the results of this paper:—

1. In the division of the *Zoosporeæ* there are to be found motile brood-spheres which appear in the form of zoospores.

2. The resting brood-spheres are more or less abnormal forms of the zoospore, devoid of cilia.

3. The colourless anterior end of the brood-spheres of *Algae*, the “canal-cell” of the higher *Cryptogams*, and the “filamentary process” of *Phænogams* are structures which are morphologically identical with the so-called mouth, germ-spot, or, what is the same thing, the *foot* of the zoospore.

4. By analogy to the phenomena of total and partial segmentation in animal ova, it happens in plants that sometimes the entire mass of the brood-sphere is appropriated to the formation of the embryo, sometimes only a portion of it; in the latter case there occurs an entire (?) or partial casting-off of the colourless foot of the brood-sphere, which casting-off occurs sometimes before (as in *Vaucheria*, *Coleochaete*, and *Salvinia*), sometimes after (?) impregnation (as in *Phænogams*).

5. The remarkable phenomenon that the zoospore is the morphologically fundamental state of the reproductive organs, is an argument for the embryological unity of the vegetable kingdom, and shows that there is a morphological as well as a histological point of contact between it and the animal kingdom.

XXX.—*A last word in Reply to Dr. Chapman and Mr. Frederick Smith on the Relations of the Wasp and Rhipiphorus.*
By ANDREW MURRAY.

THE subject has now been so fully ventilated that further discussion seems unnecessary. We have reached that stage when little more can be said on either side until further observation shall have given us fresh materials to argue from. The discussion which has taken place, however, has been of good service in clearing away irrelevant matter, and showing us where the pinch really lies. I trust that Dr. Chapman may have every success in his researches during the ensuing summer; and should he succeed in proving me to be in the wrong, I promise to make him my fullest and handsomest acknowledgments.

To Mr. Smith I have still an answer to make.

In the postscript to my last paper I said :—" I had also the pleasure of showing to Mr. Smith my specimens of pupæ [of *Rhipiphori*] with the cast skin still sticking to their tail, and I think he will no longer " &c.

In his reply Mr. Smith writes, "The last paragraph of the postscript is entirely suppositional. Mr. Murray has not shown me any of his specimens."

Mr. Smith's memory is as much at fault as his courtesy. According to my recollection, when I went to see his specimens, I took my own with me to him at the British Museum, and then and there showed them to him. They were in small flat glass phials, preserved in Canada balsam; and I have a vivid impression on my mind of Mr. Smith examining them against the light with his pocket-lens, when I pointed out the cast skins adhering to the tails; and that he then made some remark which led me to conclude that he accepted the inference I drew from them; but, as it was not made explicitly, I stated this merely as my belief.

I scarcely think that I could have dreamed all this; and as a visit to the British Museum with specimens in hand is for me a sufficiently rare event to make some impression on my mind, whilst with Mr. Smith it must be the exception to have a day pass without numbers of visitors bringing specimens for examination, I do not think that I am any way unreasonable in claiming for my positive recollection (positive in its double sense) a preference over his negative assertion—that is, always supposing it to be put as a matter of memory, which, notwithstanding his peculiar mode of expressing himself, I do not doubt Mr. Smith to mean it to be. If, however, it is as a matter of veracity that Mr. Smith really puts it, I can only make him my bow once and for all, and leave him in the enjoyment of his own opinion, consoling myself with the assured conviction that it will be shared by no one but himself.

XXXI.—*On Ornithopsis, a Gigantic Animal of the Pterodactyle kind from the Wealden.* By HARRY G. SEELEY, F.G.S., Assistant to Prof. Sedgwick in the Woodwardian Museum of the University of Cambridge*.

THE two vertebræ to which I would here call attention are in the British Museum; other remains allied to them were shown to me with much courtesy by the Rev. Mr. Fox, of Brixton. From these materials I am led to infer the existence of a new

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